DATA DICTIONARY

1.1 Project Definition

This Data Dictionary accompanies the Final Report for ASP #10-15-047, Ground Control Survey for Aerial Imagery of Western Alaska.

1.2 General File Naming Schema

Occupations are given unique identifiers using the pattern *aaacjjjs*, defined below:

- *aaa* – a three-character location code, signifying:
    - Developed Areas – the three-digit airport code (see https://en.wikipedia.org/wiki/List_of_airports_in_Alaska), or
    - Remote Areas – the first three letters of the nearest geographical place name
- *c* – a unique station letter/number for each point (each unique GCP, checkpoint, or benchmark tie) within the three-character location code
    - 1st point = *1* or *a*, 2nd point = *2* or *b*, 3rd point = *3* or *c* ...
- *jjj* – the date of the observation as a Julian day (see http://www.fs.fed.us/fire/partners/fepp/julian-calendar.pdf)
- *s* – the session number for that point.

Examples:

- ELI1235a: the first point observed in Elim, on the 235th day of the year, first session on that station.
- AKUa235a: the first point observed in Akum, on the 235th day of the year, first session on that station.

Calendar dates, when used in filenames, follow the YYMMDD format.

1.3 Digital Photos

Digital photos are field documentation photographs taken by survey personnel during GPS occupations. Photos are divided into folders by each occupation, named in the pattern *aaacjjjs* as defined above.

1.4 RINEX Files

RINEX files for each unique occupation are named in the pattern *aaacjjjs*.15o as defined above. RINEX files may not be present for occupations taken by RTK or fast-static processing or for occupations that were discarded and re-occupied due to insufficient data acquisition.

1.5 Field Notes

Field notes are scanned as unique PDF files for each survey notebook (#35-38), including GPS field forms and any additional notes in the notebook.

1.6 Location Maps

An overview map and four detail maps are provided.

1.7 Processing Summary

The project WAK015 was translated for processing into six individual projects by geographical region, each named by the major town in the region, i.e. Nome, Elim, Unalakleet, Emmonak, Mekoryuk, and Bethel. A single hub was selected for all processing in each region. All processing and adjustments are in folders with the following structure:

- Town\1-Baseline Processing – Inside the processing directory are a series of directories, one for each processed baseline. The directories have the following naming scheme: *YYYY-JJJ-session-HUB-long distance CORS*
  - YYYY is the year
  - JJJ is the Julian day
  - Session is the nth session denoted by letter
  - HUB is the hub used in the processing
  - Long Distance Cors is the CORS used for tropospheric correction
- Town\2-Adjustments – Inside the adjustment directories are two folders:
  - 1-Free contains all the output from the minimally constrained adjustment.
  - 2-Constrained contains all the output from the fully constrained adjustment.

1.8 Final Point Summary

Point coordinates are provided in the appropriate spatial reference. Horizontal datum is NAD 1983 (2011) epoch 2010.00. Vertical datum is NAVD 1988, using GEOID 12B model. Projection is in UTM Zone 3 or 4 (as appropriate) with units in meters.

Points are named with unique identifiers with the pattern *aaac*, as defined above. Point Type is defined as follows:

- CKP = check point
- GCP = ground control point
- TBM = tidal bench mark tie
- MON = GCP base (can be used as check point)